

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

Examiner interview

Applicant appreciates the courtesy extended to Applicant's representative during the personal interview conducted on February 22, 2007.

During the course of the interview, claim 16 was discussed, as generally representative of the independent claims 16-18 and 23, in view of the cited references Collot (U.S. 5,042,073) and Bonneau (U.S. 5,581,630).

Applicant's representative pointed out that neither of the references disclose a different biometric "system" wherein the term "biometric system" is meant to refer to an overarching method or approach to biometric detection, as opposed simply to different terminals, for example, that each employ the same method or approach to biometric detection.

It was further pointed out that this interpretation of "system" is clarified in the claims by the recitation that different sets of reference data (each set belonging to a different system for biometric authentication) are generated according to different algorithms.

It was agreed that, while Bonneau discloses biometric authentication in several different physical devices (car, home, personal computer), Bonneau discloses only a single system for biometric authentication wherein a "system for biometric authentication" is construed to refer to a particular method or approach to performing the biometric authentication as opposed simply to a particular physical device. That is, it was recognized that each different physical device in Bonneau performs the same method or process for biometric authentication, and thus each of the different physical devices employs the same "system for biometric authentication".

The examiner pointed out that Collot refers to plural algorithms. However, Applicant's representative noted that the "plural algorithms" are each part of the overall "system" taught by Collot, and that these algorithms are simply each a part of a single biometric system disclosed by Collot, and therefore do not correspond to the claimed invention wherein different algorithms for generating biometric reference data each correspond to different systems of biometric authentication.

The examiner noted that incorporation of certain features, such as the unique identification or header referenced at page 3 of the present application to designate the algorithm for generating each set of reference data, into the independent claims would help to clarify the meaning of "different biometric systems" as distinguishable over a single such system described by Collot.

In the claims

Independent claims 16-18 and 23 have each been amended to recite that each of the sets of biometric reference data (comparative data in claim 17) includes an identification which designates the algorithm used for generating the set of reference data. Support for this amendment is found in the first full paragraph of page 3 of the present application.

Rejection of claims 16-33 under 35 U.S.C. § 103(a)

Claims 17, 18, and 21-31 presently stand rejected as being unpatentable over Collot et al. (U.S. 5,042,073) in view of Bonneau, Jr. (U.S. 5,581,630), and claims 16, 19, 20, 32, and 33 are rejected as unpatentable over Collot and Bonneau in view of Dunn et al. (U.S. 5,987,155). These rejections are respectfully traversed for at least the following reasons.

Each of the rejections relies primarily on the teachings of Collot and Bonneau which the examiner construes collectively to disclose (as exemplified by claim 16) a portable data carrier storing at least two sets of biometric reference data each belonging to

a different system for biometric authentication and each being generated from one and the same biometric feature using different algorithms.

However, as discussed during the interview with the examiner, neither Collot nor Bonneau disclose or suggest at least two sets of biometric reference data each belonging to a different system for biometric authentication wherein the different sets of reference data are generated (from biometric data of one and the same biometric feature) using different algorithms.

Claims 16-18 and 23 have been amended to emphasize the relationship between different algorithms and different systems for biometric authentication by reciting that each set of biometric reference data includes an identification which designates the algorithm used for generating the set of reference data.

Collot discloses only a single system for biometric authentication. While Collot discloses plural algorithms (*Collot*; abstract), Collot provides no teaching or suggestion that these algorithms each are associated with a different system for biometric authentication. Stated differently, these algorithms are simply a part of a single system defined by Collot.

Collot states that “if required, and notably in the case of the capacity of the EPROM memory not being sufficient, the bulk memory can partially or totally host *a program and system management* utilities as well as parameter calculation and signature verification algorithms” (*Collot*; col. 3, lines 53-58) (emphasis added). Thus, the parameter calculation and signature verification algorithms are simply component parts of an overall system described by Collot.

According to the *Merriam Webster Online Dictionary* (<http://www.merriam-webster.com>), the term “system” is defined as “a regularly interacting or interdependent group of items forming *a unified whole*,” “an organized set of doctrines, ideas, or principles usually intended to explain the arrangement or working of *a systematic whole*” or, more simply, “an organized or established procedure” (emphasis added).

Collot defines a single such, unified or systematic whole, system. There is no teaching or suggestion that any of the parameter calculation and signature verification algorithms, which together make up the system disclosed by Collot, are individually capable of performing the complete signature analysis described by Collot. That is, there is no teaching or suggestion that any of the parameter calculation and signature verification algorithms individually constitute a system for biometric authentication.

Moreover, Collot provides no teaching or suggestion of at least two sets of biometric reference data *each belonging to a different system* for biometric authentication wherein *each of the sets of biometric reference data includes an identification* which designates the algorithm used for generating the set of reference data.

As with Collot, Bonneau does not disclose or suggest more than a single system for biometric authentication. Therefore, Bonneau cannot disclose or suggest at least two sets of biometric reference data each belonging to a different system for biometric authentication wherein each of the sets of biometric reference data includes an identification which designates the algorithm used for generating the set of reference data.

While Bonneau discloses biometric authentication in several different physical devices (car, home, personal computer), Bonneau discloses only a single system for biometric authentication wherein a “system for biometric authentication” is construed to refer to a particular method or approach to performing the biometric authentication as opposed simply to a particular physical device.

That is, each different physical device in Bonneau performs the same method or process for biometric authentication, and thus each of the different physical devices performs biometric authentication according to the same “system for biometric authentication.”

Dunn also does not disclose or suggest at least two sets of biometric reference data each belonging to a different system for biometric authentication, wherein the different sets of reference data are generated from biometric data of one and the same biometric feature using different algorithms, and wherein each of the sets of biometric reference data

includes an identification which designates the algorithm used for generating the set of reference data.

While Dunn refers to separate embodiments employing voice recognition and thumbprint recognition respectively, Dunn makes no teaching or suggestion that a single system employs both types. However, even assuming that Dunn does provide a single system that performs both voice recognition and thumbprint recognition, Dunn provides that “optionally, the user has several smart cards, each of which is password protected or protected by an alternative form of biometric information” (*Dunn*; col. 6, lines 65-67).

Therefore, Dunn does not teach or suggest that a single portable data carrier includes at least two sets of biometric data, since Dunn explicitly provides that a user has several cards, “*each of which* is password protected or protected by *an alternative form* of biometric information” *Id.*

More importantly, according to the presently claimed invention the at least two sets of biometric reference data are derived from one and the same biometric feature, each by a different algorithm. Dunn provides no teaching or suggestion that at least two sets of biometric reference data are derived from one and the same biometric feature. The thumbprint and voice recognition are clearly not “one and the same,” but are entirely different biometric features.

For at least at least the foregoing reasons, it is respectfully submitted that the cited references, either individually or in any combination, fail to form a prima facie case of obviousness of the claimed invention. Therefore claims 16-33 are allowable over the cited references. Accordingly, withdrawal of these rejections is requested.

Conclusion

In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 16-33 be allowed and the application be passed to issue.

Application No.: 09/926,634
Examiner: Hadi AKHAVANNIK
Art Unit: 2621

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'John R. Schaefer', written in a cursive style.

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